Project Proposal

Proposal Title: **Twin Peaks Habitat Restoration Project** **Proposal Number:** 1209

DWR Region: Southern Region **Lead Agency:** USFS **County:** Piute

Project Manager: Kreig Rasmussen **PM Phone:** 4358656113 **Regional Priority:** Within Focus Area

Project Type: Terrestrial Habitat **Proposed Start Date:** 7/1/2008

Project Location: The project area is located on the southwest side of Monroe Mountain, 6 miles east of Piute Reservoir, near Junction, UT.

Project Description: 800 acres of dixie harrow and seed, 2250 acres of prescribed fire in aspen/mixed conifer/mountain brush/pinyon-juniper communities.

Description of Problem/Need: The sagebrush cover densities in some areas of the project are 30-45%. The grass components are as low as 5-10% and the forb component is 0-5%. Grass and forb cover in the interspaces has declined steadily in recent years. This has lead to a pavement effect in some of the interspaces in the project area. Unless this area is treated, this trend is likely to continue. The Antelope Bitterbrush in the area doesn't appear to have good leader growth and individual plants appear less vigorous each year. Mule deer rutting transects have shown a decline in the use of the area over the past five years. Aerial elk census data collected in 2002 and 2006 by the UDWR has also shown a decline in use by elk. This decline in the amount of use by big game is an indicator of deteriorating habitat conditions in the project area.

Objectives: Within the 800 acre Dixie harrow area, reduce brush cover to an average of 15% and increase grass and forb cover to > 20% within 5 years.

Relevance to Strategic Plans: This project is in accordance with the Utah Division of Wildlife Resources' Utah Comprehensive Wildlife Conservation Strategy/Wildlife Action Plan and the Statewide Mule Deer Management plan, especially with regard to deer populations on the Monroe Unit. It is also in accordance with the Fishlake National Forest Plan.

Potential Risks: We need adequate precipitation to promote seed establishment. Noxious weeds such as cheat grass could invade the lower end of the project. Heavy grazing in the area would also have negative impacts to the project success.

Proposed Methods: We propose to use the Dixie Harrow to reduce the percentage of old decadent big sagebrush and enhance browse (bitterbrush, mountain mahogany, big sage, etc.) in a crucial deer and elk winter range. A combination of one and two passes with the Dixie harrow will be used depending on sagebrush density and quality of the grass/forb components. One pass with the Dixie harrow will remove 40-60% of the sagebrush in the area and this has proven to be an ideal mule deer winter range treatment, where shrubs need to be enhanced. A twice over treatment with the Dixie harrow is necessary when the understory is non-existent. This effectively breaks up the pavement layer and allows for seed establishment. Seed will be applied in the areas where the grass and forb components are below the desired cover percentages. The seed mix will be a variety of grasses and forbs that will be conducive to the soil type and climatic condition.

We also propose to reintroduce fire into the ecosystem on approximately 2250 acres in the area. Fire will be used in shrub areas that are too steep for the Dixie Harrow. It will also be used in variety of different vegetation types including aspen and mixed conifer. Historically fire frequented the area every 20-40 years. The removal of fire from this ecosystem has created an older more even age class in all of the vegetative components in the area. The removal of fire has also caused a decline in the quality of the aspen habitat due to conifer invasion. Fire will naturally revitalize the area while creating a variety of age classes. Fire will be used to create a mosaic pattern. Fire intensity is expected to be low to moderate.

Shapefile Name: S:/DWR/HPD-2010/GIS Shape Files/1209.shp **Seed Source:**

UPCD Reg Team Coord Date:

Proposed NEPA Action:

Proposed Arch Action:

☑ **Vegetation Monitoring** ☑ **Wildlife Monitoring**

Monitoring Information: Pre-treatment sagebrush nesting bird surveys have been completed. A riparian bird survey was also completed in the Cottonwood drainage on the north side of the project. Linear vegetation cover transects will be established to gather both pre and post treatment data. They will be read every year for five years and every three years after that. The UDWR conducts an aerial elk census every 3 years to monitor elk populations. The Forest Service conducts an annual post season mule deer transect to track mule deer population dynamics in the area.

Grazing Management:

Project Proposal

SPECIES BENEFITING

Elk	Mule Deer	Greater Sage-grouse

LAND OWNERSHIP

Owner	Acres
USFS	3050
Total	3050

PROPOSED FUNDING

Source	Amount Requested	Date Approved	Amount Approved
USFS	$87,400.00		$87,400.00
Unfunded Balance	$183,250.00		$0.00
Totals	***$270,650.00***		***$87,400.00***

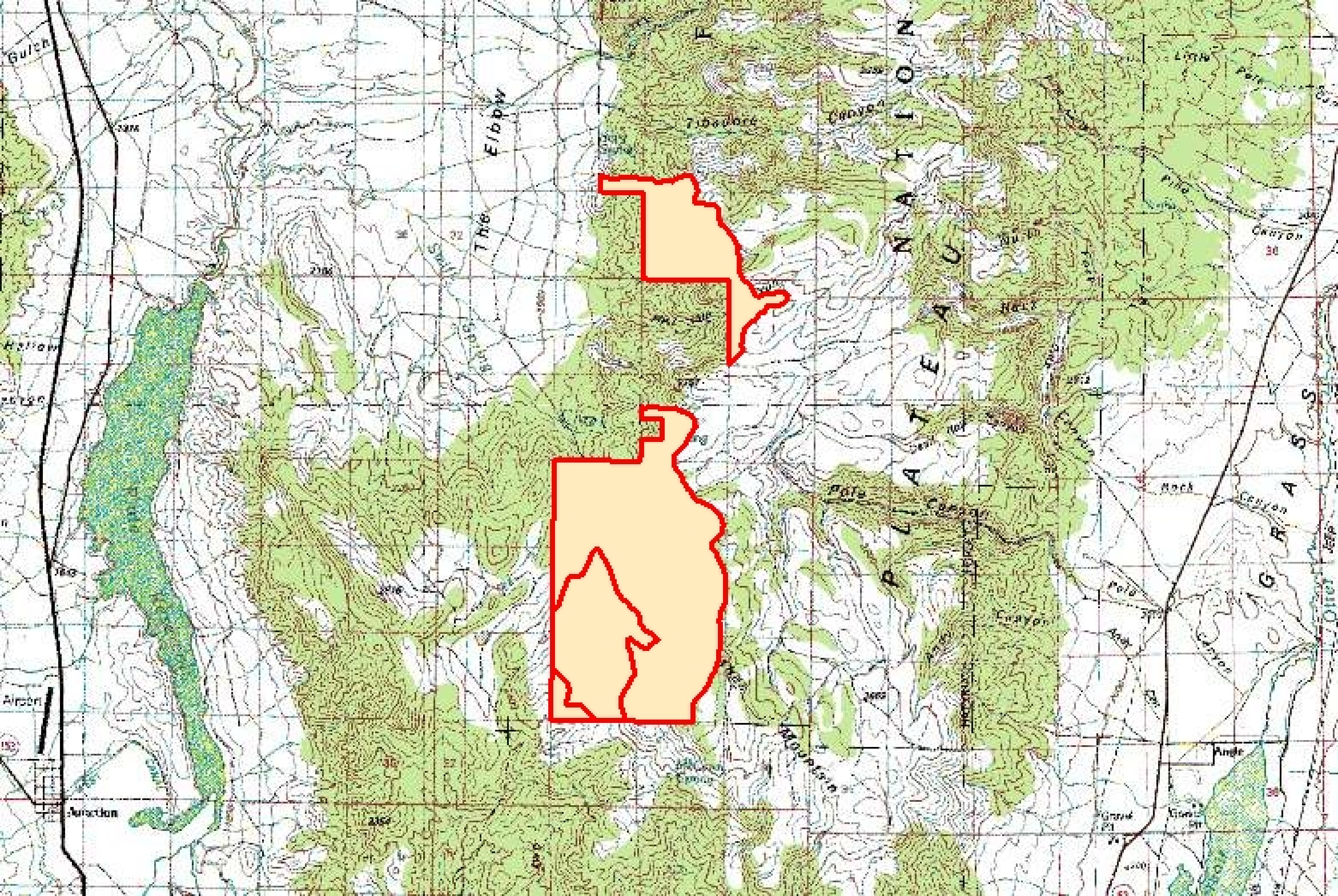
PROPOSED BUDGET

Item	Description	DWR Account	Partner Contrib.
Other	USFS - Monitoring	$0.00	$5,000.00
Seed (GBRC)	USFS - Prescribed Fire portion	$0.00	$12,000.00
NEPA	USFS - Includes arch and wildlife clearances	$0.00	$65,000.00
Equipment Rental	USFS - Tractor Rental	$0.00	$5,400.00
Personal Services	Labor and project admin and oversight	$103,500.00	$0.00
Materials and Supplies	???	$45,750.00	$0.00
Seed (GBRC)	Harrow portion 800 acres @$30/acre	$24,000.00	$0.00
Seed (GBRC)	Prescribed fire portion	$10,000.00	$0.00
	Totals	***$183,250.00***	***$87,400.00***

PROPOSED FUNDING ALLOCATION

Funding Type	Funding Percent
Big Game	100
Total	***100.00%***

Project Map:



Gulch
The Elbow
Canyon
PLATEAU
Pole Canyon
Rock Canyon
Canyon
Airport
Junction
Angle